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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,364	06/30/2003	Hang Liu		8157

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CANADA

7590

01/08/2008

EXAMINER

TIEU, BINH KIEN

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

01/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/609,364

Applicant(s)

LIU, HANG

Examiner

/BINH K. TIEU/

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 48 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-36 is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-14, 37-41, 44-47 is/are rejected.
- 7) ☐ Claim(s) 5-12, 42 and 43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. The Applicant's letter responded to the Restriction Requirement in the Office Action was received. According to the Letter, Applicant elected group 1 which included claims 1-47 for examination without traverse. Affirmation of this election must be made by applicant in replying to this Office Action. Claim 48 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 13-14, 37-41 and 44-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Dupray (Pub. No.: US 2004/0266457).

Regarding claim 1, Dupray teaches a method of determining the location of a wireless transmitting device using a movable detection station, comprising the steps of:

obtaining the signal properties of the transmitted signals of said wireless transmitting device (i.e., obtaining pilot measurements from Mobile Station (MS) 140, as shown in figure 4);

acquiring and receiving the transmitted signals from said wireless transmitting device by said movable detection station (i.e., obtaining signals through a pilot channel from target mobile 140);

performing signal parameter measurements at a plurality of positions of said movable detection station on the signals transmitted by said wireless transmitting device and received by said movable detection station (i.e., telemetering the geographic position using various RF measurements related to signals received from the target mobile 140);

determining the location and orientation of said movable detection station at each of said positions where said signal parameter measurements are performed; and performing estimation of the location of said wireless transmitting device (note paragraph [0184]).

Regarding claims 2-3, note paragraph [0198].

Regarding claim 4, note paragraph [0379].

Regarding claim 13, note paragraph [0199].

Regarding claim 14, note paragraphs [0209] and [0431].

Regarding claim 37, Dupray teaches a movable detection station for determining the location of a wireless transmitting device(s), and guiding the search for said wireless transmitting device(s), comprising:

a first antenna (i.e., an antenna for the MS 140 to communicate with a serving base station);

a first receiver, input from said first antenna, for receiving signals from said wireless transmitting device(s), and producing digitized baseband signals (i.e., a receiver to receive signals from the base station(s) and other MSs, see paragraph [0177] and [0180]);

a second antenna (i.e., an antenna for use with GPS receiver of the MS 140);

a second receiver, input from said second antenna, for receiving signals from GPS satellites (or other similar systems), producing precise frequency reference and timing to said first receiver, and producing digitized GPS (or similar) information related to the location and orientation of the movable detection station in question (see paragraph [0184]);

a display and user interface unit, for presenting the location and guiding information to the user and accepting user control to the movable detection station in question (see paragraphs [0500] and [546]-[548]); and

a digital signal processing unit, coupled to said first and second receivers, and to said display and user interface unit, performing signal parameter measurements on the signals provided by the first receiver, determining the location and orientation of said movable detection station in question, determining and refining the location estimation of said wireless transmitting device(s), accepting user controls through said display and user interface unit, producing information for display on said display and user interface unit, and controlling all the elements within the movable detection station (see paragraph [0412]).

Regarding claims 38-41, note paragraph [0184], [0402], [405] and [0440].

Regarding claim 44, note paragraph [0326].

Regarding claim 45, Dupray teaches a guiding and reference device, used to work with a detection station to determine the position of a target wireless transmitting device and guiding the search for said target wireless transmitting device, comprising of:

a first antenna (i.e., an antenna for the MS 140 to communicate with a serving base station);

a reference transmitter, coupled to said first antenna, producing signals similar to what said target wireless transmitting device produces, see paragraph [0177] and [0180]);

a second antenna (i.e., an antenna for use with GPS receiver of the MS 140);

a second transceiver, coupled to said second antenna, receiving the position and guiding information from said detection station, and transmitting protocol signal message to said detection (see paragraph [0184]);

a microprocessor, coupled to said reference transmitter and said transceiver, accepting and processing the position and guiding information received by said transceiver, configuring and controlling the functionalities of all the connected functional units within said guiding and reference device (paragraph [0412]); and

a display and user interface unit, coupled to said microprocessor, accepting user controls for said guiding and reference device and passing them to said microprocessor, and displaying to the user the position and guiding information that is received and processed by said microprocessor (paragraphs [0500] and [546]-[548]).

Regarding claim 46, note paragraphs [0402], [405] and [0440].

Regarding claim 47, note paragraph [0184].

Allowable Subject Matter

4. Claims 5-12 and 42-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 15-36 are allowed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL CUSTOMER SERVICE FOR THE SUBSTITUTIONS OR COPIES.**

Any response to this action should be mailed to:

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Or faxed to:

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401 Dulany Street
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/BINH K. TIEU/
Primary Examiner
Technology Division 2614

Date: December 2007